

2009-2010 MINOS Shift Proposal

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December 2009 (effective September 2009)

The MINOS detector is operated by three non-overlapping 8-hour shifts per day from the MINOS control room on the 12th floor of Wilson hall. These shifts must be filled for the NuMI beam to operate. The night shift runs from 00:00 - 08:00, the day shift is from 08:00 - 16:00, and the swing shift is from 16:00 - 24:00. There are also shifts available at the Soudan Mine, but these do not need to be filled to operate the experiment.

Two shifts per week

The control room shifts are scheduled in two blocks per week to allow shifters more flexibility, with one shift being the three weekend days (Friday, Saturday, Sunday) and the other being the four weekdays (Monday, Tuesday, Wednesday, Thursday). Shifters are certainly encouraged to sign up for multiple contiguous blocks to save travel money. Soudan shifts run from Monday - Friday.

It is important that shift workers know what they are doing. The shifter must understand how both the MINOS detectors and the NuMI beam work and what to do if troubles arise. While this knowledge and the shift responsibilities are spelled out in the shift documentation, on-the-job training alone is NOT ACCEPTABLE. New shifters (or existing collaborators who haven't done shifts in a while) should arrange to sit-in with an experienced shifter before flying solo for shift credit. It is also important that the shifter renew any expired safety training prior to showing-up for shifts (in particular, NuMI Underground Training).

Shift Credit Carryover

To encourage institutions to take their full quota of shifts, and to reward those who take extra shifts, an institution's deficit or excess at the end of the current shift period will carryover to the next shift period, up to a maximum of 20% of that institution's quota. This maximum shall be at least 1.0 to allow small institutions the opportunity to have a meaningful carryover.

Enforcement

Although it has thankfully not yet occurred, the IB thought it wise to authorize the spokespeople to issue sanctions should a shifter fail to show-up for a scheduled shift, up to the suspension of authorship. This is at the discretion of the spokespeople, who can certainly take into account unavoidable emergencies etc.

Filling Empty Shifts

There has been near universal support for the long-approved but seldom implemented idea of drafting institutions with the lowest shift completion fraction to fill empty shifts, provided that it is done with enough notice for the draftee to either make travel plans or to trade the shift away. This shift period will see strict enforcement of this policy, with the PI from the drafted institution being entered into the shift calendar. The PI thus has the responsibility to fill that shift personally, coerce a colleague to do so, or find a collaborator from another institution who is willing to trade shifts. The “lowest completion fraction” is defined as the fraction of an institution’s quota completed or scheduled during the current shift period. The draft is accomplished one shift at a time with statistics recalculated after each draft. The successive empty shifts will be assigned to the lowest institution (which may or may not be the same institution). This process repeats until the quarter’s schedule is full. Drafts will occur 6-weeks before the beginning of each shift-quarter (3-month period), as needed. For example, all the shifts in the January–March quarter will be filled by mid-November, with reminders and discussions happening in the first half of November. Come mid-November any necessary drafting will occur for that quarter, allowing plenty of time for draftees to make plans. Note that people who really like to plan ahead (so they can take shifts during academic breaks, for example) can always sign up well in advance.